

CLAIMS

1. (Currently Amended) An integrated circuit comprising:

a bipolar junction transistor in which a base contact region ~~forms a fishbone configuration having~~ includes a spine with at least one base finger that extends from one side of the spine and at least one base finger that extends from a second side of the spine, wherein an inner periphery of an emitter region is adjacent to a periphery of said ~~fishbone configuration~~ spine and base fingers, and an outer periphery of the emitter region occupies a perimeter of a base mesa region.
2. (Original) The integrated circuit of claim 1, wherein an emitter contact region having an isomorphic shape with respect to said emitter region is in direct physical contact with the top surface of said emitter region.
3. (Original) The integrated circuit of claim 2, wherein said contact regions comprise a conductive material.
4. (Original) The integrated circuit of claim 3, wherein said conductive material comprises metal.
5. (Original) The integrated circuit of claim 1, wherein said bipolar junction transistor comprises at least one of the following semiconductor materials: Si, SiGe, GaAs, AlGaAs, InGaP, InP.

6. (Original) The integrated circuit of claim 1, wherein said bipolar junction transistor comprises a heterojunction bipolar transistor.

7. (Currently Amended) The integrated circuit of claim 6, wherein a base region contacting tab is embedded within an extension from the spine of said fishbone configuration.

8. (Original) The integrated circuit of claim 6, wherein said heterojunction bipolar transistor is employed in a linear power amplifier.

9. (Original) The integrated circuit of claim 8, wherein said linear power amplifier is employed in a cell phone.

10. (Original) The integrated circuit of claim 6, wherein said heterojunction bipolar transistor is employed in a saturated power amplifier.

11. (Original) The integrated circuit of claim 10, wherein said saturated power amplifier is employed in a cell phone.

12. (Original) The integrated circuit of claim 6, wherein said heterojunction bipolar transistor comprises at least one of the following pairs of semiconductor materials: AlGaAs/GaAs and InGaP/GaAs.

13. (Currently Amended) The integrated circuit of claim 7, wherein dimensions of at least one of the extensions from said spine ~~of said fishbone configuration~~ comprises: 10 microns in length by 1 micron in width.

14. (Original) The integrated circuit of claim 7, wherein the shortest distance between said base region and said emitter region comprises on the order of about 15 to 20 microns.

15. (Currently Amended) The integrated circuit of claim 7, wherein ~~said fishbone configuration includes~~ at least five extensions are connected to said spine.

16. (Currently Amended) The integrated circuit of claim 7, wherein ~~said fishbone configuration includes~~ at least six extensions are connected to said spine.

17-24. (Canceled)